APPENDIX A
SUB-SURFACE EXPLORATION AND EVALUATION

1 REQUIREMENTS: The A/E will plan and perform the subsurface exploration and evaluation and analyze the information relative to the site and subsurface conditions as they pertain to project requirements. The data and analysis shall be adequate, correct and complete for the intended purposes of planning, design, quantity and cost estimating, and determining the construction feasibility of the project.

2 SUBSURFACE DATA: The A/E shall provide site and subsurface data and evaluations to the State, bidders, contractors, and construction inspectors prior to technical review of documents, bidding, and construction, respectively.

3 GEOTECHNICAL ENGINEER: The work of subsurface exploration and evaluation will be performed under the guidance, direction, and control of the geotechnical engineer. All submissions to OFP relating to and including the results of the subsurface exploration, evaluation and recommendations will bear the seal of the geotechnical engineer.

4 EXPLORATORY PROGRAM: During the latter part of the Schematic phase or the early part of the Design Development phase, the A/E will submit to the OFP, for review and approval, three (3) copies of the proposed Exploratory Program. The Exploratory Program will include, but not be limited to the following:

4.1 Scope: A summary of the project and design considerations.

4.2 Site Plan: A site plan showing locations of structures, grading, stormwater management areas, and utilities in relation to test locations.

4.3 Boring Plan: A Layout of test borings/pits relative to existing physical features and proposed locations of structures.

4.4 Description: Number, type, and estimated depths of test borings/pits or other investigative systems.

A. Soil borings must be taken after the building footprint is established.

APPENDIX A
SUB-SURFACE EXPLORATION AND EVALUATION

B. Soil borings must be supervised, on site, by the Geotechnical engineer to ensure the proper locations and proper depths.

C. Soil borings must be specified to be taken to refusal depth. If the Geotechnical engineer, at some intermediate depth, is comfortable with what is being observed in terms of bearing pressure potential, then the borings need not be extended further.

D. Soil boring must be taken at areas that the civil engineer determines are areas for possible use as fill material during the construction.

E. Soil borings must be taken at parking lot locations.

F. Soil borings must be taken where anticipated utility lines will be installed.

G. Soil borings in an urban site must be taken on a grid that will cover the entire lot. Where necessary, test pits shall be excavated searching for old foundations and abandoned tanks.

4.5 Estimated Quantities: Estimated vertical lineal feet of earth borings and rock coring and types and estimated quantities of laboratory and field tests.

4.6 Estimated Cost of the subsurface exploration including the billing unit prices.

4.7 After Approval of the Exploratory Program by the OFP, the A/E will conduct the subsurface investigation and evaluation. Prior to starting field operations, the A/E will verify the underground utilities with Miss Utility.

5 GEOTECHNICAL REPORT: Upon completion of subsurface exploration and evaluation, the A/E will submit to OFP three (3) copies of the Geotechnical Report and any additional results, reports, supplements, revisions, modifications or clarifications developed subsequent to the original report. As a minimum, the report will address each of the following:

APPENDIX A
SUB-SURFACE EXPLORATION AND EVALUATION

5.1 Geology: Geology and general nature of soil/rock/drainage/ and groundwater conditions in the project area.

5.2 History: A history of the project site and relevant information relating to nearby foundations and structures, underground springs, etc.

5.3 Boring Plan: Boring plan, to scale, indicating boring and test pit locations referenced to existing physical features and proposed locations of structures and other facilities.

5.4 Logs: Boring and test pit logs, with soil/rock description, classification, and depth and character of fill, ground water observations, and any other observations made during the exploration, including the ground surface elevations at borings and test pit locations.

5.5 Characteristics: Information relating to soil/rock character, consistency, compressibility, shear strength, safe bearing value, chemical content, corrosiveness, frost penetration depth, permeability, and relevant properties.

5.6 Quantity Estimates: Depths, locations, and quantity estimates of topsoil, unsuitable soils, existing fill, rock excavations, borrow, demolition debris or controlled substances, etc.

5.7 Rock Line: Rock line elevations with cross-sectional profiles, evidence that rock strata is sound and not underlain by mine cavities or lenses that would affect the stability and support capability. Recommendations for corrections in case of questionable stability.

5.8 Foundation Analyses: Foundation analyses and recommendations including the presentation of risk and cost effectiveness considerations.

5.9 Foundation Information: All relevant foundation information including design parameters, elevations of bottom of footings or pile tips, related soil bearing or pile capacity, factors of safety and settlement analysis considerations.

5.10 Recommendations: Recommendations for design and support of floor slab, retaining or basement walls, water or dampproofing

and drainage, underground utilities, pavements of driveways and parking lots, stability of slopes, ground water seepage control, or other stabilization procedures.

5.11 Site Evaluation: relating to excavation and earthwork feasibility. If rock excavation is involved, indicate definition, removal and handling type of equipment, blasting requirements, etc. For earthwork, indicate shrinkage factors, suitability of on/off-site materials, and borrow requirements and source. Include groundwater observations, elevations and recommendations for temporary dewatering during construction and for permanent dewatering facilities after construction. Effects of seasonal variations will be noted.

5.12 Potential Problems: Identify problems which may affect the cost of construction and/or may cause delays, including presence of controlled or hazardous substances, and furnish construction precautions and recommendations. Identify inspection, testing and quality control requirements during the construction.

5.12 Stormwater Management Recommendations: Recommend the type of stormwater management facilities suitable for the site and design parameters to be used by site engineer for systems sizing.

6 PAYMENT: Upon completion of work, the A/E will submit to the OFP an invoice for the completed reimbursable work, i.e., test boring, test pits and laboratory testing, verified and approved by the A/E for payment. Payment will be made by DGS to the A/E for the approved and completed testing work. All costs for boring stakeout, utility clearances, evaluation, engineering and inspection or supervision of field and office studies will be included in the A/E's basic fee for design services.

APPENDIX B
SEDIMENT AND EROSION CONTROL, AND STORMWATER MANAGEMENT

1 REQUIREMENTS: It is required that review and approval be granted by the Maryland Department of the Environment (MDE), Sediment and Stormwater Administration (COMAR 26.09.01.01 thru 26.09.01.11 and 26.09.02), for all projects in which existing earth surfaces are disturbed in the execution of the project, or in which on-site stormwater management is required to current limitations established by the MDE. Should a flooding hazard be present which cannot be alleviated by natural features, retention measures may be required in the design of controls. The A/E will be responsible for submitting plans, specifications and computations with the Design Development and Construction Document submissions directly to the MDE for review. One copy of the submission and transmittal letter with the MDE's signature acknowledging receipt will be submitted to DGS as part of the DD and CD submissions to the OFP Project Manager.

2 PROGRAM: The A/E will provide sediment and erosion control, and stormwater management programs at all design phase submissions. The final stormwater management, sediment and erosion control plan(s) will address all aspects of the construction phase such as stabilization of temporary stockpiles of topsoil, waste material, etc. in addition to the overall requirements of the Sediment and Stormwater Administration.

3 CONTRACT DOCUMENTS: Contract documents for sediment and erosion control and stormwater management construction will be in accordance with the Regulations approved and adopted by the MDE. No changes in these measures as shown in the contract documents may be approved by any person or agency other than the MDE. The A/E will be responsible for revising contract documents for any changes required by the MDE.

4 REFERENCE MANUAL: The reference manual controlling specifications will be: The Maryland Department of the Environment Erosion and Sediment Control Guidelines for State and Federal Projects (latest edition) and Stormwater Management Guidelines for State and Federal Projects(latest edition). Manuals can be obtained at: Maryland Department of the Environment Sediment and Storm Water Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230.

APPENDIX B
SEDIMENT AND EROSION CONTROL, AND STORMWATER MANAGEMENT

5 CERTIFICATION: Contract drawings submitted to the MDE for approval must contain both Engineer's and DGS/Developer's Certifications as shown below:

5.1 Engineer's Certification

I (We), _____, do hereby certify that the sediment control provisions shown on this plan are designed in accordance with the guidelines, standards and specifications for soil erosion and sediment control issued by the Maryland Department of the Environment, latest edition.

_____	_____	_____
Signature	Title	Date
_____	_____	
Printed Name	MD Registration No. P.E., R.L.S. or R.L.A. (Circle)	

5.2 DGS/Developer's Certification

I/We hereby certify that:

A. All development and construction will be done in accordance with this sediment and erosion control plan, and further authorize the right of entry for periodic on-site evaluation by the State of Maryland, Department of the Environment enforcement inspectors.

B. Any responsible personnel involved in the construction project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project.

_____	_____
Signature	Date
_____	_____
Printed Name and Title	Card No.

APPENDIX C
FLOODPLAIN MANAGEMENT CRITERIA FOR FLOOD-PRONE AREAS

1 REQUIREMENTS: All proposed project sites (including new construction, major improvements, and site work projects) shall be reviewed to ascertain that a one hundred (100) year floodplain determination has been made and that the source and map used for that determination are cited and attached to the program.

2 STANDARDS: All activities proposed within tidal and nontidal floodplains, including construction of buildings, grading, or utility work, shall be designed to meet or exceed the standards set forth below.

2.1 Determination: The Maryland Department of the Environment, Water Resources Administration (MDE-WRA) may provide assistance with determining the tidal/nontidal nature of the floodplain. Proposed activities located within nontidal floodplains are also subject to the provisions of Natural Resources Article, Section 8-803, Annotated Code of Maryland, and COMAR 08.05.03.01 et seq.

2.3 Permits: For tidal and nontidal floodplains, permits shall be obtained from the Maryland Department of the Environment, and the Army Corps of Engineers (if applicable).

3 BUILDING SITE

3.1 If a Proposed Building Site is in a tidal or nontidal floodplain, all new construction, manufactured buildings, and substantial improvements shall be:

A. Anchored: Designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

B. Materials: Constructed with materials resistant to flood damage

C. Methods: Constructed by methods and practices that minimize flood damage.

D. Service Equipment: Constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

E. **Review**: Reviewed by MDE-WRA for consistency with flood damage reduction objectives.

3.2 **If a Proposed Building Site** is in a tidal or nontidal flood plain:

A. Sewage Systems: New and replacement sanitary sewage systems are to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

B. Onsite Waste Disposal: Onsite waste disposal systems are to be located to avoid impairment to them or contamination from them during flooding.

4 NEW CONSTRUCTION

4.1 **All New Construction** and substantial improvements (exceeding 50% of market value of structure) of non-residential structures within tidal or nontidal floodplains shall comply with the following:

A. Floor Elevation: The lowest floor (including basement) shall be elevated at least one (1) foot above the 100-year flood level.

B. Water tightness: The structure shall be designed to be watertight to at least two (2) feet above the 100-year flood level. Walls shall be substantially impermeable to the passage of water, and structural components shall have the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(1) A Licensed Professional Engineer or Architect shall develop and/or review structural design,

specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice.

(2) A record of such certification which includes the specific elevation to which such structures are flood-proofed shall be provided to MDE-WRA and indicated on design drawings.

C. Fully Enclosed Areas: Areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters.

(1) All such designs shall be certified by a licensed Professional Engineer or Architect.

(2) The structure shall be provided with a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

5 ZONES VI-30, VE, V

5.1 All New Construction within Zones VI-30, VE, and V as delineated on the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency (FEMA) shall comply with the following:

A. Location: Structures shall be located landward of the reach of mean high tide.

B. Elevation: The bottom of the lowest structural member of the lowest floor shall be two (2) feet above the 100-year flood level.

C. Foundation: Pile or column foundation and structure attached thereto shall be anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously.

D. Support: Fill shall not be used for structural support of buildings.

E. Open Space: The space below the lowest floor shall be either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or the supporting foundation system.

APPENDIX D

MEASUREMENT OF BUILDING AREAS, VOLUMES, & EFFICIENCY FACTORS

1 GROSS AREA

1.1 The Gross Area of Buildings will be measured as follows:

A. Measurement - Measure from out to out of walls.

B. Full Areas - Include the gross area of each level:

(1) All interior floors (including stairs, shafts, etc.)
(2) Mezzanine or interior balcony
(3) Basement, sub-basement, pipe space, boiler room, etc. (6 feet or higher)
(4) Enclosed space beneath upper floors (stilt design)
(5) Mechanical space (six feet or higher)
(6) Penthouse (stair, elevator, equipment, etc. 6 feet or higher)
(7) Elevator machine room floor
(8) Fly gallery gridiron
(9) Utility Tunnels (six feet or higher) under building and within ten feet of the building perimeter.

C. Half Areas - Include one-half (½) of the gross area of:

(1) Paved porch/terrace with roof
(2) Exterior covered balcony
(3) Entrance canopy over paving
(4) Areaways (six feet wide or greater)
(5) Unenclosed space beneath building (stilt design)
(6) Loading dock with canopy

D. Exclusions - Gross Area

(1) Unusable/unfinished attic space under pitched roof
(2) Roof and roof parapets
(3) Interior court or yard
(4) Covered walks (site work)
(5) Sun shades
(6) Porch/terrace without roof
(7) Roof overhangs (no paved walkway beneath)
(8) Upper space of gym, pool, auditorium, lecture hall, large entrance exceeding one story, etc.
(9) Pipe tunnels beyond 10 feet of building (site work)

APPENDIX D

MEASUREMENT OF BUILDING AREAS, VOLUMES, & EFFICIENCY FACTORS

2 NET AREA

2.1 The Net Area of Buildings is defined and measured as follows:

A. Net Assignable Area: The sum of all floor areas of a building allotted an occupant between inner faces of walls and partitions or imaginary dividing lines of open areas.

Examples: offices, classrooms, mail rooms, conference rooms, libraries, file rooms, storage pertaining to an occupant or program (not custodial or general storage), seminar rooms, laboratories (including balance, supply and preparation rooms, etc.), lecture rooms or auditoriums (including storage, dressing and preparation rooms, stage, etc.), toilet and locker rooms (including shower rooms) only when they are private and directly supporting a room function (e.g., for a patient's room, examination room, gymnasium, kitchen, actor's dressing areas, student bedrooms or house-parent's apartment, etc.), lounges (academic, dormitory, faculty, patient, etc.), kitchen (including food storage areas, dining rooms, etc.), athletic courts, swimming pool, dance and wrestling rooms, rifle range, library reading and stack areas (including processing, study, audio, micro-film and typing rooms, but excluding "phantom" corridors not specifically defined by fixed or movable walls).

B. Non-Assignable (Supporting) Area: The total of all areas remaining after net assignable areas are deducted from the gross area. Non-assignable areas include the following:

(1) Custodial - for building protection, care, maintenance and operation, e.g., custodial storage, janitor closet, maintenance storeroom, locker room, toilet and shower room, shop, etc.

(2) Circulation - required for physical access to some subdivision of space, whether or not enclosed by partitions, e.g., corridors (access, public, service, including "phantom" corridors for large unpartitioned areas), elevator shaft, escalator, fire tower and stairs, stair hall, loading platform (except when required for a program function), lobby, public vestibule or entryway, tunnel, bridge, stair or elevator penthouse, elevator machine room, covered paved open areas, etc.

(3) Mechanical and Electrical - to house mechanical and electrical equipment, utility services and non-private toilet facilities, e.g., duct and service shafts, meter and communication closets, boiler room, mechanical and electrical equipment rooms, telephone equipment rooms, fuel room, toilet rooms for public or general use, etc.

(4) Construction - the areas actually occupied by the structural and other physical features of the building, e.g., exterior walls, fire walls, partitions, etc.

3 GROSS VOLUME

3.1 The Gross Volume of Buildings will be obtained as follows:

A. Full Volumes: (for fully enclosed areas) For each portion of the building, multiply the gross area (see paragraph 2.1 B.) by the average height of that portion from the underside of its base floor slab (or underside of crawl space floor slab or top of ground if no slab exists) to the top of the finished roof. The height of enclosed space beneath plazas, etc. will be from the underside of the base floor slab to the finished surface of the plaza.

B. Half Volumes: (for partially enclosed areas) - For each half area of the building as follows (see paragraph 2.1 C.), multiply one-half (½) of the gross area by the average height.

(1) Covered porch/terrace & building dock - from ground level to the top of the finished roof

(2) Exterior covered balcony - from the underside of the floor construction system to the top of the finished roof

(3) Entrance canopy over paving - from the underside of the slab to the top of the finished roof

(4) Areaways - from the underside of base slab to top of enclosure walls or grating

(5) Unenclosed space beneath building (stilt design) - From the top of slab to underside of ceiling, if there is an enclosed floor or crawl space beneath the open area. From underside of the slab to the underside of the ceiling, if there is no enclosed floor or crawl space beneath the open area.

APPENDIX D

MEASUREMENT OF BUILDING AREAS, VOLUMES, & EFFICIENCY FACTORS

4 TABULATION

4.1 Tabulation of Areas, Volume and Efficiency will be prepared and furnished by the A/E as follows:

A. Itemize: Itemized tabulations for the following:

(1) Gross Area - Floor by floor plus appurtenant areas
(2) Net Assignable Areas - Room by room office space standards used in developing building programs are provided in Table 1 at the end of this Division.
(3) Gross Volume - Includes half volumes of partially enclosed areas as wall as full volumes of totally enclosed areas
(4) Efficiency Factors - Divide gross area by net assignable area, e.g., 49,209 SF gross area divided by 33,705 SF net assignable area = 1.46.
(5) Percent Efficient - Divide net assignable area by gross area and multiply by 100, e.g., 33,705 SF net assignable area divided by 49,209 SF gross area, multiplied by 100 = 68.5% efficient.

B. Building Efficiency Factors (Guidelines): Table 5 in Chapter IV identifies the range of efficiency factors for numerous types of buildings common to State facilities. They are to be adhered to closely. Refer to Attachment #4 of this Manual, Summary - Areas, Volume & Efficiency, for the method and parameters by which the efficiency factor of a building will be determined.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

All building design and design/build projects shall comply with all codes enacted in place by the State of Maryland, Department of Housing and Community Development, in compliance with COMAR.05.02.07. Information about the Maryland Codes Administration can be obtained from the internet www.dhcd.state.md.us or at 410-514-7220, fax 410-987-8902.

The Design team shall also meet and exceed the minimum code standards in compliance with the following standards and/or policies established by the Department of General Services.

DIVISION 1-GENERAL REQUIREMENTS:

1.0 Verify that the description and scope of work is complete and properly lists all salient features of the project.

2.0 Scheduling and phasing of work shall be specified to suit the needs of the Using Agency and coordinated with the contract work.

3.0 Specifications shall include a work sequencing schedule. Phasing requirements shall be practical and clearly stated.

4.0 Plans and specifications shall properly specify, define and identify material and equipment to be salvaged and turned over or to be delivered to the Owners address by the contractor.

5.0 Clearly define the procedures and restrictions for scheduling utility outages and interruptions with the Owner.

6.0 Restriction of access to the site shall be spelled out on the plans and in the specifications.

7.0 Request clarification from local municipalities regarding the applicability, status and responsibility for obtaining permits to be in compliance with specific local permit issues.

A. W.S.S.C permits for water and sewer connections and stormwater management systems are required for projects constructed in Montgomery and Prince George's Counties.
B. Sediment and Erosion Control and Stormwater Management System permits are required from the Anne Arundel Soil Conservation District for projects constructed in the Severn River watershed.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

8.0 Architectural/Structural, General

A. Clearly identify all existing and new work.
B. It is the responsibility of the A/E team to perform a Quality Control and Coordination Review of the Contract Documents before submission to DGS for review.
C. Check overall dimensions of mechanical/electrical equipment to ensure that the designed utility room is adequate and meets side clearances.
D. The test boring logs with soil classifications and ground water levels shall be shown on the drawings for future reference and use by DGS.
E. Reference notes by number shall be limited in use in preference to written note. Reference notes if utilized shall be repeated on all drawing sheets where reference notes are used.
F. On sheet drawing format (border, title block, etc,) shall be standard and consistent throughout the set of drawings from all disciplines.
G. Provide a vestibule at the building entrance to prevent mass escape of cooled and heated air.
H. Show modular grid or structural column grid with number and letter on each architectural, structural, mechanical, and electrical floor plan and building elevations.
I. All multi-story building typical floor plans and reflected ceiling plans should be drawn separately.
J. Reflected ceiling plan should show all diffusers, lights, access panels, etc.
K. All plans and elevations shall be drawn to same scale (min 1/8 inch = 1 ft).
L. Show room names and room numbers on each architectural, mechanical and electrical plan.
M. All plans shall have the same building orientation.
N. Use consistent terminology on the drawings and in the specifications.
O. Check drawings and specifications for cross references to eliminate inconsistencies.
P. Indicate "R" value of exterior wall system and roof system on the drawings.
Q. Total area of each floor, including mezzanine and basement, shall be listed on the drawings.
R. Show all "Not In Contract" equipment items in dashed outlines.
S. Recessed slab areas for any finish materials or equipment shall be shown clearly on the architectural and

structural drawings.

T. Provide a janitor's closet on each floor of a building, with a mop and broom holder with stainless steel shelf.

U. Door schedule, window schedule and finish schedule should be included in the drawings and not in the specifications.

V. Footings and foundation and basement wall lines below grade should be shown as dashed lines.

W. All wall sections shall be at a minimum 3/4" = 1'-0" scale.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

DIVISION 2 - SITE WORK

2.0 Visit the site to verify existing conditions and survey information.

2.1 Clearly indicate limits of clearing and grubbing.

2.2 Horizontal and vertical control monuments shall be shown.

2.3 Verify property line dimensions and bearings.

2.4 Verify the availability and location of all electrical, gas, water, sewer, and other utilities to be connected to a new building.

2.5 Sewer and water line crossing details shall be shown on the drawings showing allowable clearances within the project limits. Water and sewer lines shall not be in the same trench side by side.

2.6 Provide individual profiles for all water, sewer and storm drain lines. Profiles shall use the same horizontal scale as the site plan, with the vertical scale 10 times greater. Unless otherwise approved by DGS, the horizontal scale shall be 1 inch = 40 feet and the vertical scale shall be 1 inch = 4 feet.

2.7 Provide invert elevations of all pipes passing through or under the exterior walls of a building.

2.8 Trees shall not be located over sewers or other underground utility lines.

2.9 Use standard symbol designations for all utility services shown on all utility plans in the construction documents.

2.10 The Architect shall provide a site development plan including all work within the property limits and/or work contiguous to the building perimeter.

2.11 Provide a North Arrow on the site plan and each floor plan for proper orientation.

2.12 Show finished floor and grade elevations, and bench marks and grid lines for horizontal and vertical control.

2.13 Show spot elevations at all exterior door locations and at each corner of the building.

2.14 Provide an enclosure around the dumpster area.

2.15 Outdoor air conditioning units shall be screened with landscaping.

2.16 Storm Drainage Systems: The civil engineering consultant on the A/E team shall be responsible for the design of storm drainage systems to include but not be limited to any and/or all conditions of sheet flow, open and closed channel methods of safe storm water conveyance.

A. Coordination: The civil engineer shall be responsible for the coordination of building, roof and foundation drainage systems, site drainage systems, sediment and erosion control and stormwater management systems.
B. Site evaluation: The A/E shall be responsible for identifying and bringing to the attention of the owner any unsafe conditions which may result in increased cost and any long-term maintenance concerns related to storm drainage.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

DIVISION 3 - CONCRETE

3.0 The same mix and brand of cement shall be used for all concrete for all walks and curbs and gutters throughout.

3.1 All building floor slabs on compacted fill and gravel shall be 5" thick over a 8 mil vapor barrier.

3.2 Slope all floors to drains where provided.

3.3 Levelness and flatness tolerance for floor slabs shall be clearly specified.

3.4 All exterior hard surface areas abutting the building shall slope away from the building at a slope of 1/4:12.

3.4 Control joints shall be provided for a maximum of 900 square feet of floor area.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

DIVISION 4 - MASONRY

4.0 Specifications shall identify all masonry types and requirements pertaining to the job. A face brick sample panel (4'x5') shall be constructed on-site as directed.

4.1 Exterior cavity wall construction shall be brick with 2" cavity and 1 1/2" insulation with CMU backup with 2 1/2" metal studs at 16"o/c with batt insulation and 5/8" gypsum drywall with painted finish.

A. Optional: Solid wall with brick exterior and CMU with 3 5/8" metal studs at 16" o/c with full thickness batt insulation and 5/8" gypsum drywall with painted finish.
B. Interior CMU surface shall be sprayed with damp proofing in both options.

4.2 Brick joints hall be tooled concave or grape-vine as appropriate.

4.3 Structural galvanized metal studs with brick veneer and 2" cavity wall system is permitted for one-story buildings only.

4.4 Provide 2" minimum continuous perimeter insulation on foundation wall above footing and extended 24" minimum under slab for meeting thermal requirements.

4.5 Provide exterior wall expansion joints at 30' ± intervals and located to interface with the facade design.

4.6 Parapet walls are not recommended except to comply with IBC and need to be not less than 30" above the roof surface.

4.7 Provide mortar net or equal at the bottom of all cavity walls with through wall flashing and weep holes. Weep holes should be the rope type.

4.8 Provide laminated copper flashing above all exterior openings.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

DIVISION 5-METALS

5.0 Specify all interior metal stud types, size (min. 3 5/8" or 6"), and spacing at 16" o/c in compliance with the latest edition of the construction guide manual published by the National Gypsum Company.

5.1 Bollards, and steel angles or channels shall be used for all service and receiving areas to protect the building from damage. All exterior miscellaneous steel shall be hot dip galvanized.

5.2 Access to the roof top areas and elevator machine rooms shall be provided by means of a stairway with a landing at the top. Vertical ladders and alternating tread ("Lapeyre") stairways shall only be used if approved in advance by DGS.

5.3 Provide exterior roof access ladders for access to different roof levels.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

DIVISION 6 - WOOD AND PLASTICS

1.0 Exterior use of wood elements should be avoided.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

DIVISION 7-THERMAL AND MOISTURE PROTECTION

7.0 Sprayed on asphaltic dampproofing shall be applied to: all exterior surfaces of the interior wythe of exterior masonry cavity walls; the interior surfaces of exterior single wythe masonry walls in attic spaces; and the CMU interior face of exterior walls with metal stud and GWB finish.

7.1 Refer to the DGS roofing policy for approved roofing systems, warranty and life-cycle costs.

7.2 Provide snow guards on all pitched roof installations with gutters and down spouts appropriately sized and in compliance with SMACNA.

7.3 Roof slopes shall be 1/4:12 slope minimum.

7.4 Provide an overflow pipe at each roof drain or scupper in parapet condition.

7.5 Provide sound attenuation batts in all GWB partitions for privacy conditions and reduction of equipment noise for conference rooms, offices, mechanical equipment rooms, etc).

7.6 Provide walk pads to and around roof mounted equipment where a built-up roofing system is provided.

7.7 Show 'R' value of required insulation in walls and roofs on the drawings. Metal roofs should be insulated below the roof framing system. Low slope roofs should be insulated between the top of the roof deck and the built-up roofing system.

APPENDIX E
ARCHITECTURAL AND BUILDING STANDARDS

DIVISION 8 - DOORS AND WINDOWS

8.0 Exterior doors and frames shall be painted galvanized steel. Where required by architectural style, solid wood panel doors are acceptable for certain projects in historical buildings.

8.1 Replacement and new windows shall be aluminum clad. Three window manufacturers considered to have equivalent products are Marvin, Pella and Loewen. Screens are optional.

8.2 For all building styles, 10% of the total window area or window count shall be operable.

8.3 Provide rabbeted saddle thresholds and door weather- stripping at all exterior doors. Provide an astragal for all exterior double doors.

8.4 Exterior overhead and coiling doors shall be an insulated type, weatherstripped at the jambs and head.

8.5 All aluminum frames shall be thermal break design with insulated glazing.

8.6 Exterior frames shall be 14 gauge, galvanized steel. Interior frames shall be 16 gauge steel.

8.7 Exterior doors shall be 16 gauge galvanized steel. Interior doors shall be 18 gauge steel.

8.8 Fully glazed doors shall be glazed with safety glass. Glazed openings adjacent to entrance doors that extend to the floor, and glazed panels less than 18 inches above the floor shall be glazed with safety glass.

8.9 Door opening to toilet rooms, dressing rooms, or other private areas shall be located so as to block direct views into the rooms.

8.10 Mechanical rooms shall have doors of adequate size to accommodate the installation and removal of equipment.

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DIVISION 9 - FINISHES

9.0 Transition strips or thresholds shall be used between dissimilar floor surfaces.

9.1 Interior metal stud and GWB systems and accessories shall be designed and specified in compliance with the latest edition of the National Gypsum Company Construction guide. GWB shall be 5/8" thick, standard. In certain situations, 1/2" thick GWB could be approved.

9.2 Three GWB partition types shall be considered: partitions to the underside of the slab above; partitions extending 6" ± above the finished ceiling height; and partitions stopping at the underside of the ceiling system. The use and locations of ceiling types will be determined during the early stages of design.

9.3 Metal furring channels (hat section) shall be used for attachment of GWB on ceilings as prescribed by the Gypsum Construction Guide. Furring channels shall never be used to furr-out masonry walls; rather, 2 1/2" metal studs shall be used in that application.

9.4 Provide access panels in ceilings where required for service and maintenance of equipment located above the ceiling.

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DIVISION 10 - SPECIALITIES

10.0 Provide solid plastic toilet compartments and urinal screens for all public toilets.

10.1 Provide bird and insect screens on exterior louvers.

10.2 Provide corner guards at GWB partition external corners in high use and public areas.

10.3 Exterior and interior building signage must comply with the requirements of the Americans with Disabilities Act.

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DIVISION 11 - EQUIPMENT

11.0 All loading docks shall incorporate dock levelers.

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DIVISION 12 - FURNISHINGS

12.0 Check with using Agency whether window treatment is to be specified and detailed and included in the contract.

12.1 Window blinds shall be provided for all exterior windows.

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DIVISION 13 - SPECIAL CONSTRUCTION

13.0 _____ ____

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DIVISION 14. CONVEYING SYSTEMS

14.0 Elevators

Hoistway

14.1 The elevator hoistway shall be encased through its full height in a fire resistant enclosure per the building code.

14.2 Doors or panels on all hoistway openings shall be fire resistance rated for not less than 1 ½ hours when installed in 2 hour fire resistance rated construction.

14.3 Floor numbers, not less then 4 inches in height, shall be provided on the hoistway side of doors and panels.

14.4 A metal or concrete floor shall be provided at the top of the hoistway. The floor shall be capable of sustaining a concentrated load of 300 pounds.

14.5 The elevator hoistway shall be provided with means to prevent the accumulation of smoke and hot gasses in case of fire, as required by the building code.

14.6 If there is a dimensional change in the hoistway that creates a ledge greater than ½ inch, it shall be beveled at angle of not less than 60 degrees or more than 75 degrees.

14.7 Elevator rails shall not be used as the lighting protection system grounding conductor.

Machine Room

14.8 The elevator machine room shall be a fully enclosed, fire resistant structure, as required by the building code.

14.9 Access to the machine room and overhead machinery space shall be provided by a stairway with a platform and swinging door at the top level. The size of the platform shall be sufficient to permit the full swing of the door plus 2 feet from the top stair riser to the swing line of the door.

14.10 The access door to the machine room and overhead machinery space shall be a minimum 30 inches wide and 6 feet 8 inches high, and shall be self closing and self locking. Doors must be kept closed and locked, and shall have a spring-type lock

arranged to permit the door to be opened from the inside without a key.

14.11 A stop switch shall be provided in the hoistway overhead machinery space adjacent to the lock jamb side of the door.

14.12 Headroom in the machine room and overhead machinery space shall be minimum 7 feet.

14.13 Permanent electrical lighting shall be provided in the machine room with a minimum illumination of 19 foot candles at floor level. The light control switch shall be mounted on the wall adjacent to the lock jamb side of the access door.

14.14 The machine room shall be provided with natural or mechanical ventilation to protect the electrical equipment from overheating. The machine room should not vent into the hoistway or stairwell. The temperature and humidity range shall be permanently posted in the machine room.

14.15 A duplex receptacle rated at not less than 15 amps, 120V shall be provided in each machine room.

14.16 The only ducts permitted to be installed in the hoistway, machine room, and machinery space are those required for heating, cooling, and ventilating these specific spaces.

14.17 Standard sprinkler protection conforming to the requirements of ANSI/NFPA 13 shall be installed in the hositway, machine room and machinery space. All risers and returns shall be located outside these spaces. Branch lines in the hoistway shall supply sprinklers at not more than one floor level. Smoke detectors shall not be used to activate sprinklers in these spaces or to disconnect the main line power supply. Pipes or ducts conveying gasses, vapors, or liquid not associated with the operation of the elevator shall not be installed in any hoistway, machine room, or machinery space.

14.18 Air conditioning equipment is permitted in the machine room. Air conditioning equipment shall not be located directly above elevator equipment. The clear head room below suspended air conditioning equipment shall be 7 feet minimum. Condensation drains shall not be located directly above elevator equipment.

Pit

14.19 Drains connected directly to sewers shall not be installed in the elevator pit. Sumps with sump pumps may be installed to prevent the accumulation of water in the elevator pit. The elevator pit sump shall be covered.

14.20 A fixed vertical ladder shall extend not less than 42 inches above the sill of the elevator pit access door.

14.21 Permanent electrical lighting shall be provided in the elevator pit with a minimum illumination of 10 foot candles at the pit floor. The light shall have an incandescent bulb with a breakage guard. The light switch shall be accessible from the access door. A duplex GFI electric receptacle rated not less than 15 amps, 120 volts shall be provided in the elevator pit.

14.22 An elevator stop switch shall be installed in the elevator pit. The stop switch shall be accessible from the elevator pit access door. When access to the pit is through the lowest landing hoistway door, a stop switch shall be located approximately 18 inches above the floor. When the pit exceeds 67 inches in depth, an additional stop switch is required. Where more than one switch is provided, they shall be wired in series.

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DIVISION 15 - MECHANICAL

15.0 Provide sound and vibration isolation for all motor driven equipment. All equipment to be on house cleaning pads.

15.1 Provide sound and vibration isolation for all roof-top mechanical penthouse rooms and roof top equipment.

15.2 All roof-top HVAC equipment shall be located out of view or screened from view.

15.3 Coordinate mechanical floor plans with architectural plans. Ensure that mechanical equipment rooms have adequate clearances on all sides to maintain and clean equipment, to replace equipment, and to replace tubes in chillers or boilers.

15.4 Floor drains shall be provided for equipment blow-offs.

15.5 Floor drains shall be provided with trap primers.

15.6 Provide building sections at critical locations showing the coordinated locations of pipes, ducts and mechanical equipment.

15.7 Mechanical rooms should be located remotely from building areas with noise sensitive uses.

15.8 The HVAC design shall utilize hard ducted return air systems. Plenum areas above ceilings shall not be used for return air distribution, unless DGS determines there is suitable justification to waive this restriction.

15.9 Provide a hose bibb in each exterior wall of a building.

15.10 Provide access panels in ceilings where required for service and maintenance of equipment located above the ceiling.

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DIVISION 16 - ELECTRICAL

16.0 Beginning with the schematic phase submission, all electrical and telephone main equipment rooms and local closets shall be included in the floor plans.

16.1 For a design-build contract all calculations shall be received by the 50% CD submission.

16.2 Electrical power and lighting plans shall be drawn on separate drawings.

16.3 Demolition shall not be shown on the same plans with new work.

16.4 Provide for and show a complete fully circuited building power wiring system including service equipment switchgear / switchboard, panelboards, transformers, disconnect switches, motor starters, circuit breakers, receptacles, conduits, wires, boxes, and all those items requisite for a complete installed and operating system for the building including any alternates. All conductive components shall be copper.

16.5 Electrical schedules shall include the following information as applicable: schedule name, location, mounting, main device, bussing, interrupting capacity, voltage, phase, connected lighting load, connected power load, connected receptacle load, and expected demand. Each circuit shall include the following: circuit number, description of load served, wire size, connected load, and circuit breaker size.

16.6 Interior luminaires in general shall utilize 4 foot flourescent lamp fixtures. Design applications of 2'x 2' fluorescent fixtures that apply "U-Bent" lamps and 8 foot fluorescent lamps shall only be permitted where those lamps are standard to the institution for maintenance purposes.

16.7 All panel boards shall have main circuit breakers. Main lugs only panel boards and plug-in-type circuit breakers in the panel boards shall not be acceptable.

16.8 Transient voltage surge suppression (TVSS) shall be provided for branch circuits supplying lab and office receptacles and all other circuits feeding power sensitive equipment.

16.9 All feeders and branch circuits will be provided with a separate green insulated equipment ground conductor.

16.10 Rigid galvanized metal conduit will be used for feeder circuits, exposed exterior work, and locations where exposed to damage.

16.11 Use of BX (Armored) and Romex (Non metallic) cables are not permitted. Restricted use of MC cable is allowed for lighting fixtures, VAV boxes, and receptacle drops. All home runs shall be installed with wire in conduit. No MC cable home runs.

16.12 Supports and fasteners shall be used to hold all cables, conduits, and trays firmly in place. Supports and fasteners shall be selected to provide an adequate safety factor. All conduit/cable trays shall be supported from the building structure and not from any other ductwork, pipes, ceiling grid, or equipment. Wire shall not be used for support.

16.13 Where applicable utilize cable trays for horizontal distribution cable management system. Use of cable tray shall only be used for distribution of telecommunications, Fibre, and COAX. Cable tray shall not be permitted for power distribution.

16.14 The following values should be used as a guideline when selecting motors. Fractional horsepower up to and including 1/4 HP shall be 115 volt. 1/3 and 1/2 horsepower 208 or higher voltage single phase. 3/4 horsepower and above 3 phase.

16.15 The size of the emergency power generator set shell be calculated by A/E based upon the connected load including any Alternate plus a minimum 20 percent spare capacity for future expansion.

16.16 For modifications to existing fire alarm systems require the services of a factory authorized technician to supervise all modifications.

APPENDIX F
UTILITY PERMITS AND CONNECTIONS

The following section shall be included in Division 1 of the contract specifications on all projects requiring connections to private and public utility systems.

SECTION 01035 - UTILITY PERMITS AND CONNECTIONS

A. The project requires the following permits, utility connections, or related services provided by the government agencies or utility companies noted: _____

_____

The bidder shall include in its bid the following allowances for these permits, utility connections, and related services:

1. Allowance amount: _____*, for (describe permit, utility connection, or other service)*

2. Allowance amount: _____*, for (describe permit, utility connection, or other service)*

Contractor shall obtain the necessary permits and shall subcontract with the named government agency or utility company for completion of the utility connections or related services described in this paragraph 01035 A.

B. If the actual fee charged by the government agency or utility company for the permit, connection, or related service is more or less than the amount of the allowance provided in paragraph 01035 A, the contract amount shall be increased or decreased by change order by the difference between the amount actually charged by the government agency or utility company and the amount of the allowance provided in paragraph 01035 A. The contractor shall be entitled to no overhead or profit on any resulting increases in the contract amount.

C. Each government agency and utility company described in paragraph 01035 A may invoice DGS directly for payment of the permit, connection, or service fees charged by the government agency or utility company. The contractor authorizes DGS to pay the

fees directly to the appropriate government agency or utility company upon receipt by DGS of a proper invoice. DGS shall notify the contractor in writing of each payment made directly by DGS to a government agency or utility company under this Section 01035.

D. Contractor shall reflect in contractor's schedule of values and requisitions the amounts of the allowances and the State's payments under this Section 01035.

E. The permits, utility connections, and related services described in paragraph 01035 A may not be the only permits, utility connections or related services required for proper performance of the work (as defined in the General Conditions) required by the contract. The contractor shall, at no additional cost to the State, obtain and pay for all other permits, connections, and related services required for proper performance of the work.

F. After execution of the contract with contractor, DGS may identify other permits, utility connections, or related services not identified in paragraph 01035 A and not otherwise required by paragraph 01035 E which DGS desires contractor to furnish for the project. In that event, DGS may issue a unilateral change order to the contractor requiring the contractor to furnish those permits, utility connections, or related services upon the terms and conditions of this Section 01035.

APPENDIX G
STATE FIELD OFFICE

FOR CAPITAL IMPROVEMENT PROJECTS, THE A/E SHALL INCORPORATE THE APPROPRIATE REQUIREMENTS INTO THE APPROPRIATE DIVISION 1 SECTION OF THE CONTRACT SPECIFICATIONS.

1 The Contractor shall furnish and maintain, at his cost and for the State's exclusive use, the following:

1.1 State Field Office: Provide one (1)prefabricated and completely finished temporary office trailer unit with lockable entrances and operable windows. Only the State shall have keys to this trailer. At such time as deemed necessary by the DGS Inspector, the State field office may be moved inside of the substantially complete building. However, all space requirements, specified equipment and services must remain intact.

1.2 Space Requirements:

A. The Field Office shall have a minimum of 500 gross square feet of floor area.

B. Provide running water, toilet room with flush water closet, lavatory and approved water drainage system, medicine cabinet, paper towels and toilet paper (including dispensers).

C. Installation Schedule: Provide a complete Owner's Field Office facility in a location on the site as coordinated with the owner. The office shall be set up and made ready for use promptly upon issuance of a Notice to Proceed and at least seven (7) days prior to beginning any work on the contract.

D. The Contractor shall provide weekly janitorial service to keep quarters of the State representatives clean and neat at all times and adequately stocked with supplies.

E. Equipment:

(1) Electric Water Cooler and Water: Provide continuous delivery for the duration of the construction project of 5 gallon bottled water such as "Great Bear" or approved equal.

(2) Heating: Sized to provide a minimum 70 degrees F inside temperature under the ASHRAE winter outside

design conditions applicable to the construction site location. Provide distribution system sufficient for uniform heating and comfort.

(3) Ventilation: Mechanical type sufficient for comfort during the change between heating and cooling seasons.

(4) Air-conditioning: System sufficient to provide a minimum of 80 degrees F inside temperature under ASHRAE summer outside conditions applicable to the construction site location.

(5) Equipment Options: Provide the equivalent heating, ventilation, and air-conditioning in a single combination unit or in other combinations.

(6) Electrical: Complete wiring system including service entrance per NFPA No. 70. Provide one (1)duplex convenience outlet for each 150 square feet of floor space with four (4)four duplex convenience outlets at a minimum. Provide additional outlets and circuits for water cooler and air conditioning and heating units as required. Provide a minimum of one (1)smoke detector. Provide fluorescent lighting suitable for the tasks, based on 3 watts per square foot uniform distribution. Requirement - 40 fc illumination at work surfaces).

(7) Telephone: Provide and maintain a separate telephone service with three (3) telephone numbers (telephone, FAX and Internet) for the duration of the contract. Service shall not be shared with the contractor. The contractor shall pay for all telephone services, including long distance business calls. Separate message answering services shall also be provided through either computer software, telephone service provider or tape recorder.

(a) Portable digital wireless phone with the following standards:

1. Nextel system using Motorola i90c with walkie-talkie capability or equal.

(8) Facsimile Machine: Provide and maintain a plain paper fax machine with all necessary supplies including paper and replacement tone cartridges as needed. Fax machine will become property of the State at end of project.

(9) Copier: Provide and maintain a photocopier (and paper) with the following standards:

(a) Minimum copy speed of 12 letter-size 8 1/2" x 11" copies per minute.

(b) Capable of reliably producing at least 3,000 copies per month.
(c) Stationary platen or moving platen.
(d) Copier shall use plain recycled bond paper.
(e) Copy sizes 5 1/2" x 8 1/2 to 8 1/2" x 14".
(f) Maximum original paper size 8 1/2" x 14".
(g) Copier shall have a minimum total paper capacity of 250 sheets.
(h) Copies shall have copy count meter.
(i) Copier shall have copy contrast control.
(j) Copier shall have copy unit selection of 1-99.
(k) Copier of tabletop design shall be furnished with the offeror's standard commercial cabinet base included.
(l) Copier shall have a self-diagnostics system which indicates a minimum, the following conditions:
1) needs toner
2) needs paper
3) paper misfeed or jam.
(m) Automatic 2-sided copying (Duplexing).

(10) First Aid Supplies: Comply with governing regulations

(11) Hardhats: Provide five (5) hardhats sufficient to meet OSHA Standards.

(12) Office supplies including but not limited to:
(a) Trash cans (2)
(b) Boxes of file folders (4)
(c) Boxes of hanging file folders (4)
(d) Standard stapler (1)
(e) 3 hole punch (1)
(f) 2 hole punch (1)
(g) 1 tape dispenser with tape

(13) Digital camera (1) - Kodak EasyShare DX 4900 Zoom with minimum 64MB card and including camera dock or equal. Camera and dock will become property of the State at the end of the project.

(14) Computer (Desktop or Notebook where applicable). Computer and all associated hardware and software listed below will become property of the State at the end of the project.

Desktop Computer minimum requirements:
(a) Pentium® 4 Processor 2.40GHz w/ 533MHz front side bus/ 512K L2 Cache/ 256MB PC1066 RDRAM

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STATE FIELD OFFICE

(b) Quietkey Keyboard
(c) 19 in (18.0 in viewable, .24dp) Flat CRT Monitor
(d) 64MB DDR NVIDIA— GeForce4 MX™ Graphics Card
(e) 30GB 7200RPM Hard Drive
(f) 3.5 in Floppy Drive
(g) 4x DVD+RW/+R Drive w/CD-RW including CD Creator CD-RW,74 Minute,650MB,12X (25-Pack Spindle) Rewrite CD Media
(h) Microsoft® Office XP Professional with MS Word, Excel, PowerPoint, Access
(i) Optical USB Mouse
(j) Integrated Intel® PRO 10/100 Ethernet DSL or Cable where available if not available 56K Telephony Modem for Windows
(k) Internet Access/Service Provider with local service requiring prior approval
(l) Virus and Firewall Protection
(m) Digital Sound Card
(n) Speakers
(o) Surge Protection for PC, Printer, Scanner, Modem, Speakers, and Monitor.
(p) 2 Year Warranty parts & service with 2 Year At-Site Service with 24 hr response.

Printer minimum requirements:
(a) 1200 x 1200 dpi
(b) 10 ppm
(c) 4 MB Dram
(d) Two input sources
(e) 10 additional toner cartridges

If applicable, Notebook Computer minimum requirements:
(a) Mobile Pentium® 4 1.9GHz-M,15.0 UXGA
(b) 256MB,DDR,266M,2DIMM
(c) 32MB DDR nVidia® GeForce4™ 440 Go AGP 4X Graphics
(d) 30GB Hard Drive
(e) 1/2 " drive
(f) Microsoft® Office XP Professional with MS Word, Excel, PowerPoint, Access
(g) Integrated Network Card
(h) Internal 56K Modem
(i) Internet Access/ Service Provider with local service requiring prior approval

(j) 24XCD-RW/DVD Combo with CD Creator
(k) Virus and Firewall Protection
(l) 2 Year Warranty parts & service with 2 Year At-Site Service with 24 hr response.
(m) CD-RW,74 Minute,650MB,12X (25-Pack Spindle) Rewrite CD Media.
(n) Digital Sound Card
(o) Portable printer

F. Furnishings

(1) Furniture: Provide the following new or "like new" reconditioned items:

No. Required	Item
1	30 x 60 desk, flat top double pedestal and two suitable chairs
12	Folding chairs
2	Filing cases, metal 4 drawer legal size, 27-inches deep, baked-on enamel finish. File cabinets shall have keyed locks. Provide keys to inspector
1	Fireproof file cabinet, metal 4 drawer legal size 27 inches deep, heavy duty keyed lock, baked-on enamel finish. Cabinet should be securely mounted to the floor. Provide keys to inspector.

(2) Provide Tables: Provide a table suitable for 12 people.

(3) Sample Shelves: Provide ceiling high units 30 inches deep by 4 feet wide. Compartmentalize horizontally with vertical intermediate supports not over 3 feet apart. Close ends and backs with plywood sheet.

(4) Plan Racks: Provide 1 unit with at least 10 sets of plan binders.

(5) Shades: Provide standard fabric roller shades or metal slat Venetian blinds at all windows.

(6) Fire Extinguisher: Provide ABC fire extinguisher, the number and extinguisher rating and location of which shall be in accordance with NFPA No.10.

G. Maintenance: The contractor will be responsible for the maintenance and/or repair of all items listed in this section for the duration of the contract. If an item cannot satisfactorily repaired it shall be replaced by the contractor within two (2) working days.

H. Security: Provide adequate security measures for the DGS Construction Office at all times. Within two (2) days of a reported theft, the Contractor shall be responsible to replace any equipment or supplies reported stolen from the DGS Construction Office.